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Network Working Group
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NAME/FINGER

Introduction

This note describes the Name/Finger protocol. This is a simple protocol which provides an interface to the Name and Finger programs at several network sites. These programs return a friendly, human-oriented status report on either the system at the moment or a particular person in depth. Currently only the SAIL (SU-AI), SRI (SRI-(KA/KL)), and ITS (MIT-(AI/ML/MC/DMS)) sites support this protocol, but there are other systems with similar programs that could easily be made servers; there is no required format and the protocol consists mostly of specifying a single "command line".

To use via the network:

ICP to socket 117 (octal, 79. decimal) and establish two 8-bit connections.

Send a single "command line", ending with <CRLF>.

Receive information which will vary depending on the above line and the particular system. The server closes its connections as soon as this output is finished.

The command line:

Systems may differ in their interpretations of this line. However, the basic scheme is straightforward: if the line is null (i.e. just a <CRLF> is sent) then the server should return a "default" report which lists all people using the system at that moment. If on the other hand a user name is specified (e.g. FOO<CRLF>) then the response should concern only that particular user, whether logged in or not.

Both ITS and SAIL sites allow several names to be included on the line, separated by commas; but the syntax for some servers can be slightly more elaborate. For example, if "/W" (called the "Whois switch") also appears on the line given to an ITS server, much fuller descriptions are returned. The complete documentation may be found at any time in the files ".INFO.;NAME ORDER" on MIT-AI, "FINGER.LES[UP,DOC]" on SU-AI, and "<DOCUMENTATION>FINGER.DOC" on

SRI-KL, all freely accessible by FTP (with the exception of SRI-KL, where TOPS-20 requires the "anonymous" login convention).

Allowable "names" in the command line should of course include "user names" or "login names" as defined by the system, but it is also reasonable to understand last names or even full names as well. If a name is ambiguous, all possible derivations should be returned in some fashion; SAIL will simply list the possible names and no more, whereas an ITS server will furnish the full standard information for each possibility.

Response to null command line - "default" listing:

This is a request for a list of all online users, much like a TOPS-10 or TENEX "systat". To fulfill the basic intent of the Name/Finger programs, the returned list should include at least the full names of each user and the physical locations of their terminals insofar as they can be determined. Including the job name and idle time (number of minutes since last typein, or since last job activity) is also reasonable and useful. The appendix has examples which demonstrate how this information can be formatted.

Response to non-null command line - "name" listing:

For in-depth status of a specified user, there are two main cases. If the user is logged in, a line or two is returned in the same format as that for the "default" listing, but showing only that user. If not logged in, things become more interesting. Furnishing the full name and time of last logout is the expected thing to do, but there is also a "plan" feature, wherein a user may leave a short message that will be included in the response to such requests. This is easily implemented by (for example) having the program look for a specially named text file on the user's directory or some common area. See the examples for typical "plans".

Implementation miscellany:

Anyone wishing to implement such a server is encouraged to get in touch with the maintainers of NAME by sending a message to BUG-NAME @ MIT-AI; apart from offering advice and help, a list of all sites with such servers is kept there. It is also suggested that any existing programs performing similar functions locally (i.e. not as net servers) be extended to allow specification of other sites, or names at other sites. For example, on ITS systems one can say ":NAME<cr>" for a local default listing, or ":NAME @SAIL<cr>" for SAIL's default listing, or ":NAME Foo@MC<cr>" to ask MIT-MC about Foo's status, etc.

It should be noted that connecting directly to the server from a TIP or an equally narrow-minded TELNET-protocol user program can result in meaningless attempts at option negotiation being sent to the server, which will foul up the command line interpretation unless the server knows enough to filter out IAC's and perhaps even respond negatively (IAC WON'T) to all option commands received. This is a convenience but is not at all required, since normally the user side is just an extended NAME/FINGER type program.

And finally a little background:

The FINGER program at SAIL, written by Les Earnest, was the inspiration for the NAME program on ITS. Earl Killian at MIT and Brian Harvey at SAIL were jointly responsible for implementing the protocol just described, and Greg Hinchliffe has recently brought up a similar server for SRI-KA and SRI-KL.

EXAMPLES

Note: it is possible for some lines of the actual output to exceed 80 chars in length. The handling of such lines is of course dependant on the particular user program; in these examples, lines have been truncated to 72 chars for greater clarity.

Three examples with a null command line:

Site: MIT-AI
Command line:

```
-User-    --Full name--          Jobnam Idle TTY -Console location-
XGP     0 Xerox Graphics Printer XGPSPL      T24 Datapoint Near XGP (9TH)
FFM     U Steven J. Kudlak       HACTRN      T41 Net site CMU-10A
KLH     + Ken Harrenstien        F           T42 Net site SRI-KL
←←←013  -  Not Logged In         HACTRN 1:26.T43 DSSR UNIX x3-6048 (MIT-*
CWH     U Carl W. Hoffman        E         4.T50 919 Very Small Data Bas*
CARL    A Carl Hewitt            HACTRN 5:03.T52 813 Hewitt x5873
APD     M Alexander Doohovskoy   XGP    1:52.T54 912 9th Floor Lounge x6*
JJK     T James Koschella        E           T55 824 Hollerbach, Levin, *
KEN     L Kenneth Kahn           E           T56 925 Moon (Tycho under) *
```

Site: SAIL
Command line:

```
     Person              Job Jobnam Idle    Terminal
DAN Dan Sleator          46 MACLSP      DM-3          150/1200 modem 415 49*
DEK Don Knuth             3 E        3.  tv-55  205  Library
                         20 PI       2   TV-55  205  Library
ES  Gene Salamin         44 SD MC       TV-40  223a Farmwald
JJ  Jerrold Ginsparg     11 TELNET      DM-0          150/1200 modem 415 49*
JMC John McCarthy         1 FINGER   .   detached
                         12 E        2.  IML-15        McCarthy's house
KRD Randy Davis          42 AID      7   TV-52  203  Allen
LES Les Earnest          23 TEMPS    2.  DM-1          150/1200 modem 415 49*
ME  Martin Frost         17 E        3   tv-46  220  Filman, Frost
                         31 E            TV-46  220  Filman, Frost
PAM Paul Martin           9 E            TV-106 251C King, Levy, Martin
ROD Rod Brooks           37 MACLSP   3   TV-117 250C
RWG Bill Gosper          30 SD MC       TV-34  230e Robinson
                                        TV-67  213  Kant, McCune, Steinbe*
RWW Richard Weyhrauch    39 E           TV-42  214  Weyhrauch
SYS system files          6 FINGER      PTY122       job 5 Arpanet site AI*
```

```
Site: SRI-KL
Command line:

Thursday, 15-Dec-77 01:21:24-PST  System up  3 Days, 22:20:52  28 Jobs
Drum   0%  Load avs 0.26 0.23 0.31   14 Act, 10 Idle,  8 Det

User     Personal Name       Job Subsys 15m%  TTY  Room    Console Location
BLEAN    Bob Blean            37 EXEC    0.0   41  K2007   Blean
KLH      Ken Harrenstien      83 TELNET  1.6   12  J2023   Spaceport
KREMERS  Jan Kremers          48 TECO    0.0  121  Dialup  326-7005 (300 Ba*
MAINT    Digital Equipment    54 SNDMSG  0.5   43  K2035   Melling
MCCLURG  Jim McClurg          40 EXEC    0.0   26  PKT
MMCM     Michael McMahon      31 EXEC    1.5  122  Dialup  326-7006 (300 Ba*
MOORE    J Moore              52 TV      0.2  124  Dialup  326-7008 (300 Ba*
PATTIS   Richard Pattis       19 LISP    0.8   11  ARC
PETERSO  Norman Peterson      33 EXEC   25:12 234           (RAND-TIP)
STONE    Duane Stone          34 TELNET 3:51  240           (RADC-TIP)
                              27 EXEC   7:11  232           (SRI-KL)
TORRES   Israel Torres        64 BSYS    0.0   76  K2079   TI by tape drives
                              68 EXEC   1:15  104  K2029   Operators' Office
```

Examples with names specified:

```
Site: MIT-AI
Command line: klh

KLH     + Ken Harrenstien          Last logout 10/16/77 13:02:11  No plan.


Site: MIT-MC
Command line: cbf

CBF     M Charles Frankston        Not logged in.  Plan:
  I'll be visiting another planet til about December 15.  If anyone
  wants to get a hold of me transmit on some fundamental wavelength
  (like the radius of the hydrogen atom).


Site: MIT-MC
Command line: smith

BRIAN   A Brian C. Smith           Last logout 11/24/77 08:02:24  No plan.
DBS     T David B. Smith           Last logout 12/03/77 11:24:01  No plan.
BPS     T Byron Paul Smith         Not logged in.  No plan.
GRS     U Gary R. Smith            Last logout 12/12/77 18:43:19  No plan.
JOS     S Julius Orion III Smith   Last logout 11/29/77 06:18:18  No plan.
$PETE   M PETER G. SMITH,          Not logged in.  No plan.
IAN     L Ian C. Smith             Not logged in.  No plan.
AJS     D Arnold J. Smith          Last logout 12/09/77 14:31:11  No plan.


Site: SU-AI
Command line: smith

"SMITH" is ambiguous:
RS  Bob Smith
DAV Dave Smith
JOS Julius Smith
LCS Leland Smith
```

```
Site: SU-AI
Command line: jbr

     Person              Job Jobnam Idle Line  Room  Location
JBR Jeff Rubin            16 COPY   27. TV-43  222   Rubin
                                      TV-104 233   hand-eye table
```

```
Site: SU-AI
Command line: bh

     Person                    Last logout
BH  Brian Harvey        22:49 on 14 Dec 1977.  Plan:
    ↑008-Oct-77  2156   BH  ↑Y12257 (1-Jul-78)
Weekdays during the day I'm usually unreachable; I'm either at S.F.
State or at Benjamin Franklin JHS in San Francisco, but neither place
is recommended for leaving messages.  Evenings and weekends I'm
generally home (55) 751-1762 unless I'm at SAIL.  I log in daily from
home.
```

```
Site: SRI-KL
Command line: greg

GREG (Greg Hinchliffe) is on the system:

Job Subsys  # Siz  Runtime    1m%  15m%  TTY  Room   Console Location
62  EXEC    1   0  0:00:10.6        0.8  235         (SUMEX-AIM)

Last login: Mon 12-Dec-77, 15:05, from SUMEX-AIM (Host #56.)
GREG has no new mail, last read on Mon 12-Dec-77 15:10
```